

ULTRABASS

BX1200

User's Manual

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ENGLISH



www.behringer.com



ULTRABASS BX1200

IMPORTANT SAFETY INSTRUCTIONS



To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside; refer servicing to qualified personnel.

To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture.



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure—voltage that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.



ULTRABASS

Ultra-flexible 120-Watt, 2-channel Bass Workstation with ULTRABASS processor and SHAPE filter

- ▲ Powerful 120-Watt (RMS) Bass Workstation with bass reflex cabinet
- ▲ Special custom-made 12" aluminum speaker for tight, powerful sound
- ▲ 2-channel operation with dedicated volume controls
- ▲ Additional ULTRABASS sub-harmonics processor for ultra-low frequencies
- ▲ Revolutionary SHAPE filter for extensive sound manipulation
- ▲ Innovative DYNAMIZER technology provides ultimate punch
- ▲ Musical opto-limiter for maximum volume without distortion or pumping effects
- ▲ Indestructible, short-circuit proof power amp with two-speed fan
- ▲ Active 4-band EQ for comprehensive sound control
- ▲ Balanced direct output (XLR) for easy connection to a mixing console
- ▲ Master volume control and headphones output
- ▲ Connector for external speaker cabinets
- ▲ Dedicated tuner output
- ▲ Amp in and preamp out connectors for hooking up other bass amplifiers and preamps
- ▲ Insert loop for outboard or pedal effects
- ▲ Tape input for line-level signals (e.g. CD player, drum machine)
- ▲ Tape output for recording and live applications
- ▲ Dual footswitch for channel selection and sub-harmonics processor included
- ▲ Toroidal transformer for maximum power reserves
- ▲ Extremely rugged construction ensures long life even under the most demanding conditions
- ▲ Manufactured under ISO9000 certified management system

BX1200

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FOREWORD



Dear Customer,
welcome to the team of BEHRINGER users, and thank you very much for expressing your confidence in us by purchasing the BEHRINGER BX1200.

Writing this foreword for you gives me great pleasure, because it represents the culmination of many months of hard work delivered by our engineering team to achieve a very ambitious goal: to present you with an outstanding Bass Workstation that gives you maximum flexibility and performance with

its unique sound character and broad range of functions. The task of designing our new ULTRABASS certainly meant a great deal of responsibility, which we assumed by focusing on you, the discerning user and musician. Meeting your expectations also meant a lot of work and night shifts. But it was fun, too. Developing a product usually brings a lot of people together, and what a great feeling it is when all who participated in such a project can be proud of what they've achieved.

It is our philosophy to share our enjoyment with you, because you are the most important member of the BEHRINGER team. With your highly competent suggestions for new products you've made a significant contribution to shaping our company and making it successful. In return, we guarantee you uncompromising quality as well as excellent technical and audio properties at an extremely reasonable price. All of this will enable you to give free rein to your creativity without being hampered by budget constraints.

We are often asked how we manage to produce such high-quality devices at such unbelievably low prices. The answer is quite simple: it's you, our customers! Many satisfied customers mean large sales volumes enabling us to get better purchasing terms for components, etc. Isn't it only fair to pass this benefit on to you? Because we know that your success is our success too!

I would like to thank all of you who have made the ULTRABASS possible. You have all made your own personal contributions, from the developers to the many other employees at this company, and to you, the BEHRINGER user.

My friends, it's been worth the effort!

Thank you very much,

Uli Behringer

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1. INTRODUCTION

With the BX1200 you have acquired a state-of-the-art 2-channel Bass Workstation that sets new standards in bass amp engineering. Right from the start, our goal has been to design a revolutionary amp that stands out from the herd of "ordinary" bass amplifiers. And indeed, the BX1200 gives you plenty of functionality and a broad range of connection and expansion options. In short: you'll be fascinated to find that the BX1200 is a Workstation with a character.

BEHRINGER is an audio engineering company that has been successfully developing products for studio and live applications for many years now. Our range of products includes microphones and a variety of 19" devices (compressors, enhancers, noise-gates, tube processors, headphone amps, digital effects devices, DI boxes, etc.) as well as monitoring and P.A. speakers plus professional live and recording consoles. You will find all of our technical know-how combined in your BX1200.

We also set great store by flexibility, which has become a particularly important factor in the music business over the past few years. Modern bass players need to offer a broad range of sounds, but should still be able to play in different kinds of applications at short notice: home recording, studio, live concerts. For this reason, it has always been our prime concern to give you a Bass Workstation that offers you a complete set of useful functions, but can still be operated intuitively and quickly.

Additionally, the world of electric bass playing has changed: new basses, with five or six strings, are being launched all the

time, there are effects devices and the desire to create one's own "unique" sound—which can only be achieved with innovative amplifiers. The unique ULTRABASS BX1200 gives you pioneering sounds coming from an extremely compact design.

As technology advances, you've got to keep track of latest technological breakthroughs to avoid falling by the wayside. Which is what we did, by continuously improving this Bass Workstation and including many of your valuable suggestions.

Experience a new-generation Bass Workstation with fascinating features:

- ▲ Astounding sound diversity through filter and sub-harmonics processor.
- ▲ State-of-the-art amplifier technology combined with a built-in bass cabinet gives you precision in the treble and punch in the bass range.
- ▲ The high-grade and custom-built 12" aluminum speaker opens up new dimensions in terms of sound.
- ▲ The rugged and compact design makes the ULTRABASS your favorite amp for club gigs and rehearsals.
- ▲ The trapezoidal cabinet allows you to use the BX1200 as an active floor monitor for the bass player in your band.
- ▲ Plenty of power plus a built-in DI output—even on big stages you'll cut a fine figure with your BX1200.

1.1 The design concept

We designed the BX1200 to finally start the world of bass amp design moving. Your absolutely low-noise and indestructible Bass Workstation represents the current state of the art.

The robust cabinet is made of high-grade and non-polluting E1-MDF boards, which are grooved, multi-glued and free of formaldehydes. This is to make sure that your BX1200 keeps on working even when the going gets tough.

1.1.1 The DYNAMIZER technology

When it comes to amplifying the signals delivered by electric instruments, you've got to separate the wheat from the chaff. Unlike mixed or mastered signals, electric instruments usually deliver extremely high signal peaks which, when raised in gain, produce nasty distortion. How an amplifier responds to these signal peaks can therefore be seen as one of its most essential quality features.

Many manufacturers use limiters preceding the power stage to limit dynamic signal peaks. However, the problem is the preamp, which is why we've equipped the BX1200 with our unique DYNAMIZER preamp circuit that gives you a lively and punchy sound with signal peaks—even if the amp reaches its power limits. Extreme signal peaks are limited effectively while the average level and hence the power of the overall signal is raised. The sound gets more vivid and powerful in character, without any unmusical distortion. With its opto-limiter in the power stage it is virtually impossible to overdrive the ULTRABASS BX1200.

1.2 Before you begin

Your BX1200 was carefully packed in the factory and the packaging is designed to protect the unit from rough handling. Nevertheless, we recommend that you carefully examine the packaging and its contents for any signs of physical damage, which may have occurred during transit.



Be sure that there is enough space around the unit for cooling and please do not place the ULTRABASS on high temperature devices such as radiators etc. to avoid overheating.



The mains connection of the BX1200 is made by using the enclosed mains cable and a standard IEC receptacle. It meets all of the international safety certification requirements.



You will find additional information in chapter 5 "INSTALLATION".

WARNING!



2. CONTROL ELEMENTS

2.1 Front panel

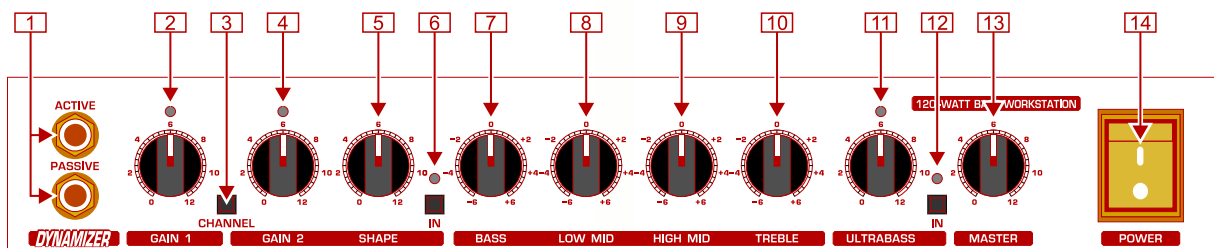


Fig. 2.1: Front panel control elements

- 1 These are the inputs for your electric bass guitar. The ACTIVE jack is for active basses, the PASSIVE jack for passive instruments with low output levels.
- 2 The GAIN 1 control governs the volume of the first channel. When this channel is active, the LED above the GAIN 1 control lights up.
- 3 Press the CHANNEL button to select either of the two ULTRABASS channels.
- 4 The GAIN 2 control sets the volume for the second channel. When this channel is active, the LED above the GAIN 2 control lights up.

ULTRABASS BX1200

3.3 Setup for master/slave operation

3.3.1 The ULTRABASS BX1200 as master device

The PREAMP OUT jack allows you to connect the BX1200 to an external power amp, using a commercial instrument cable equipped with mono phone plugs. Then, connect the PREAMP OUT jack to the input jack on the external power amp.

3.3.2 The ULTRABASS BX1200 as slave device controlled by an external amp/preamp

To use the power amp of your ULTRABASS for an external amp or preamp you need to connect the line output of the external amplifier to the AMP IN jack on your BX1200.

4. THE SHAPE FUNCTION

The SHAPE function on your BX1200 provides a revolutionary type of filter that you can use to modify your bass sound in full detail. The filter allows you to shape your sound—which is a must for bass players today. Extreme filter settings will give your bass sound more power, for example:

You want to play a live bass solo but the sound doesn't cut through. The solo should stand out, rather than being drowned. Use the 2 channels to set up a solid basic sound plus a very distinctive solo sound (channel 1 = basic sound; channel 2 = solo sound, because the SHAPE filter is effective on channel 2 only). Connect a footswitch to toggle between the two channels.

The SHAPE filter is a bargain when you are using two different bass guitars. Maybe you want to change from a jazz bass to a fretless bass, and vice versa—two instruments with a completely different sound. During gigs you often lack the time to set up your amp for a different instrument, so you'll be happy to have a BX1200, because you can use channel 2 and its SHAPE filter for your fretless sound, and channel 1 for the jazz bass.

5. THE ULTRABASS FUNCTION

Extremely low bass sounds playing one octave below the lowest available bass guitar frequency are quite trendy in current music productions. Often, you can do this in studios only, because most bass amplifiers have no sub-harmonics function. Not so with your BX1200: the ULTRABASS processor gives you the ultimate tool to shape up-to-date sounds.

You'll be surprised how deep your bass can sound with the ULTRABASS function of your BX1200. Extreme settings can be particularly interesting if you want to give your sound some flavor in the treble range. For example, sustained notes played on the D and G strings can sound as if played on a fretless bass. By the way: when you use the SHAPE filter set to a low cutoff frequency (which is a nice setting for growling sounds), but feel that there's not enough power in the bass range, the sub-harmonics processor will be there to help you: even though the sound is still growling, it now has much more depth.

6. INSTALLATION

6.1 Mains voltage

Three triangular markings can be found on the fuse holder at the AC power connection socket. Two of these three triangles will be aligned with one another. The ULTRABASS is set to the operating voltage shown next to these markings and can be switched over by twisting the fuse holder by 180°.

6.2 Mains connection

The mains connection is made by using the enclosed mains cable and a standard IEC receptacle. It meets all of the international safety certification requirements.

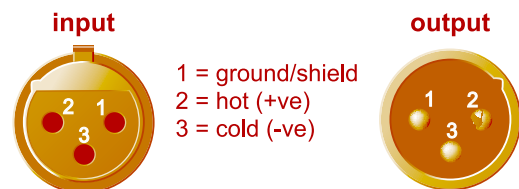


6.3 Audio connections

The BEHRINGER ULTRABASS is equipped with mono phone jacks, except for the headphones output which is on a stereo jack. The DIRECT OUTPUT is on a balanced XLR connector. The Tape Ins and Outs are on cinch connectors.

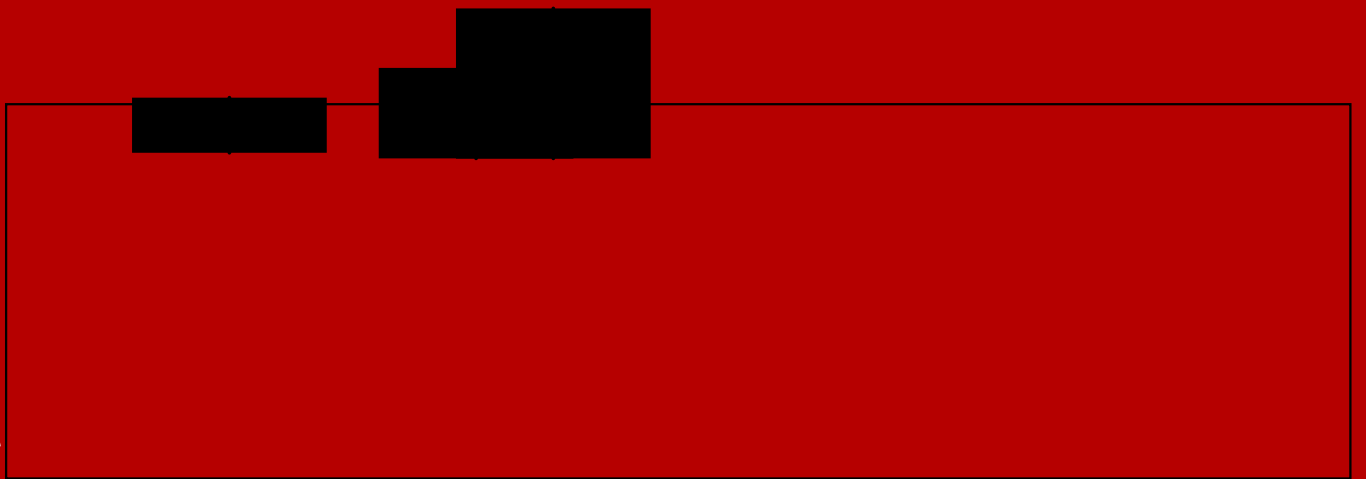


Balanced XLR connectors



For unbalanced use pin 1 and pin 3 have to be bridged

Fig. 6.1: XLR connections



8. WARRANTY

To be protected by the extended warranty, the buyer must complete and return the enclosed warranty card within 14 days of the date of purchase to BEHRINGER Spezielle Studioteknik GmbH, in accordance with the conditions stipulated in § 3. Failure to return the card in due time (date as per postmark) will void any extended warranty claims. Based on the conditions herein, the buyer may also choose to use the online registration option via the Internet (www.behringer.com or www.behringer.de).

1. BEHRINGER (BEHRINGER Spezielle Studioteknik GmbH including all BEHRINGER subsidiaries listed on the enclosed page, except BEHRINGER Japan) warrants the mechanical and electronic components of this product to be free of defects in material and workmanship for a period of one (1) year* from the original date of purchase, in accordance with the warranty regulations described below. If the product shows any defects within the specified warranty period that are not excluded from this warranty as described under § 3 and 4, BEHRINGER shall, at its discretion, either replace or repair the product using suitable new or reconditioned parts. In the case that other parts are used which constitute an improvement, BEHRINGER may, at its discretion, charge the customer for the additional cost of these parts.

2. If the warranty claim proves to be justified, the product will be returned to the user freight prepaid.

3. Warranty claims other than those indicated above are expressly excluded.

1. To obtain warranty service, the buyer (or his authorized dealer) must call BEHRINGER (see enclosed list) during normal business hours returning the product. All inquiries must be accompanied by a description of the problem. BEHRINGER will then issue a return authorization number.

2. Subsequently, the product must be returned in its original shipping carton, together with the return authorization number to the address indicated by BEHRINGER.

3. Shipments without freight prepaid will not be accepted.

1. Warranty services will be furnished only if the product is accompanied by a copy of the original retail dealer's invoice. Any product deemed eligible for repair or replacement by BEHRINGER under the terms of this warranty will be repaired or replaced within 30 days of receipt of the product at BEHRINGER.

2. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country for which the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in materials or workmanship. The warranty does not cover any such modification/adaptation, irrespective of whether it was carried out properly or not. Under the terms of this warranty, BEHRINGER shall not be held responsible for any cost resulting from such a modification/adaptation.

3. Free inspections and maintenance/repair work are expressly excluded from this warranty, in particular, if caused by improper

handling of the product by the user. This also applies to defects caused by normal wear and tear, in particular, of faders, potentiometers, keys/buttons and similar parts.

4. Damages/defects caused by the following conditions are not covered by this warranty:

▲ improper handling, neglect or failure to operate the unit in compliance with the instructions given in BEHRINGER user or service manuals.

▲ connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used.

▲ damages/defects caused by force majeure or any other condition that is beyond the control of BEHRINGER.

5. Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the warranty.

6. If an inspection of the product by BEHRINGER shows that the defect in question is not covered by the warranty, the inspection costs are payable by the customer.

7. Products which do not meet the terms of this warranty will be repaired exclusively at the buyer's expense. BEHRINGER will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 6 weeks after notification, BEHRINGER will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.

This warranty is extended exclusively to the original buyer (customer of retail dealer) and is not transferable to anyone who may subsequently purchase this product. No other person (retail dealer, etc.) shall be entitled to give any warranty promise on behalf of BEHRINGER.

Failure of BEHRINGER to provide proper warranty service shall not entitle the buyer to claim (consequential) damages. In no event shall the liability of BEHRINGER exceed the invoiced value of the product.

1. This warranty does not exclude or limit the buyer's statutory rights provided by national law, in particular, any such rights against the seller that arise from a legally effective purchase contract.

2. The warranty regulations mentioned herein are applicable unless they constitute an infringement of national warranty law.

* Customers in the European Union please contact BEHRINGER Germany Support for further details.

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